

SEQUENCE LISTING

<110> YOUSEF, George
<110> DIAMANDIS, Eleftherios P.

<120> Methods for Detecting Endocrine Cancer

<130> 11757.0079USWO

<140> 10/526,111

<141> 2005-02-28

<150> PCT/CA2003/001311

<151> 2003-08-28

<150> US 60/407,332

<151> 2002-08-28

<160> 6

<170> PatentIn version 3.2

<210> 1

<211> 277

<212> PRT

<213> homo sapiens

<300>

<308> AF135024

<309> 2000-06-26

<313> (1)..(277)

<400> 1

Met Trp Pro Leu Ala Leu Val Ile Ala Ser Leu Thr Leu Ala Leu Ser
1 5 10 15

Gly Gly Val Ser Gln Glu Ser Ser Lys Val Leu Asn Thr Asn Gly Thr
20 25 30

Ser Gly Phe Leu Pro Gly Gly Tyr Thr Cys Phe Pro His Ser Gln Pro
35 40 45

Trp Gln Ala Ala Leu Leu Val Gln Gly Arg Leu Leu Cys Gly Gly Val
50 55 60

Leu Val His Pro Lys Trp Val Leu Thr Ala Ala His Cys Leu Lys Glu
65 70 75 80

Gly Leu Lys Val Tyr Leu Gly Lys His Ala Leu Gly Arg Val Glu Ala
85 90 95

Gly Glu Gln Val Arg Glu Val Val His Ser Ile Pro His Pro Glu Tyr
100 105 110

Arg Arg Ser Pro Thr His Leu Asn His Asp His Asp Ile Met Leu Leu
115 120 125

Glu Leu Gln Ser Pro Val Gln Leu Thr Gly Tyr Ile Gln Thr Leu Pro
130 135 140

Leu Ser His Asn Asn Arg Leu Thr Pro Gly Thr Thr Cys Arg Val Ser
145 150 155 160

Gly Trp Gly Thr Thr Thr Ser Pro Gln Val Asn Tyr Pro Lys Thr Leu
165 170 175

Gln Cys Ala Asn Ile Gln Leu Arg Ser Asp Glu Glu Cys Arg Gln Val
180 185 190

Tyr Pro Gly Lys Ile Thr Asp Asn Met Leu Cys Ala Gly Thr Lys Glu
195 200 205

Gly Gly Lys Asp Ser Cys Glu Gly Asp Ser Gly Gly Pro Leu Val Cys
210 215 220

Asn Arg Thr Leu Tyr Gly Ile Val Ser Trp Gly Asp Phe Pro Cys Gly
225 230 235 240

Gln Pro Asp Arg Pro Gly Val Tyr Thr Arg Val Ser Arg Tyr Val Leu
245 250 255

Trp Ile Arg Glu Thr Ile Arg Lys Tyr Glu Thr Gln Gln Gln Lys Trp
260 265 270

Leu Lys Gly Pro Gln
275

<210> 2
<211> 10080
<212> DNA
<213> homo sapiens

<300>
<308> AF135024
<309> 2000-06-26

<313> (1) .. (10080)

<400> 2

caggaggttg	cacactgttc	ctccacctc	gccactgcac	ccccaccaag	gatggaattg	60
gaggcggggg	gcagattcca	gggtcagggc	tgtcaagagt	gaatgaggcg	aggagacatt	120
caggagcaga	gaggtttcag	acgcggaggt	tccgggcacg	ccctcaacac	ccccttcacc	180
ttctcctcag	gccccgcccc	ccctgccctc	ccctcccgat	cccggagcca	tgtggccccct	240
ggccctagt	atcgccctcc	tgaccttggc	cttgtcagga	ggtaagaatg	cgcgggggtg	300
gaggcgcggc	ggccattcgg	gacaatggta	ggaggggtca	ggccggaggg	ggagggggcg	360
tgggagccgc	gagctccgcc	ccccgcccac	tcggggccgg	gtccagtggg	gacagctcag	420
agctcttct	gcttgtccct	gggtgacctg	gtttcccggc	tgaggttggc	cctccgaccc	480
cagacccttc	acctccaaa	ataccctcgc	agcagccctc	ccgcggttca	aggttctctg	540
tcctctctgg	aaagctgaaa	gacatgggtt	cgcgtcctga	cgtgccgct	ttgagccagt	600
agcctagcag	ctgctttgtg	cctaaattgt	tttcatctgg	aaaatgggct	taatctataa	660
gtgcttacca	gagaagggtca	ctgtgaatat	tgaaacgagg	taatgcgtcg	agccttcagt	720
atgtcgcagg	tagaaggggac	ttgaaagtta	gccacttagc	cgttattact	ttattagtag	780
tattcctttt	tttttttttt	tttttttttg	agatggaacc	ttgctctgtc	tcccaggctg	840
gaaggcagt	gcacgatctt	ggcttactga	aacctccgcc	tcccgggttg	aagcgattct	900
cctgcctcag	cctcccgagt	agctgggatt	acaggcgccc	gccaccacgc	ccaactaatt	960
tttgtatttt	cagcagagac	gggggttcgc	catgttggtt	aggctgggtct	cgaacttcta	1020
acttcaagta	gccccggtca	gcctcccaaa	gtgccaggat	tacaggcatg	agccaccgag	1080
ccgggctct	agtattctgt	cttcatactc	agccccctcc	agaaccttct	agattgttat	1140
tttaatcctt	gggttgaccc	caaacctatg	tgacctcacc	caaattgggt	agtccttaag	1200
atccttatgg	atctttccca	tctttccctg	ccgttgtagg	caggttctct	ggaaaccccg	1260
ttcatgaatc	atttattcat	tcaacaaaca	gctattaaac	accggccact	gtgctgggtg	1320
ctgtacaagc	agagacacag	tcctgtctct	cagcacctgg	agtctagcgg	ggacagacgc	1380
agatgttatt	caaacaatta	tccaaataat	tagttaataa	ttatcttgac	atgaggtgaa	1440
gacttcaagg	agccaagcca	ggggcctaga	gatgtaatgg	cggcttcccc	accagaggcc	1500
ttcccaaagg	gcttgaccct	tgagccaaga	cctgaaaaag	gagggatctg	tgggtgcctg	1560
gcacctggca	ccatccttgg	cctgaagggtg	gggtggcttt	tctcctctgg	cgacactccc	1620

tggattcatg	cccgtgccac	tcttgagtgc	cacaccctag	gctaggagac	ccacacgcta	1680
cgccttgtgg	agtcctcaac	aacctggcga	ggtaggtgca	ttgtaattac	tccaatttca	1740
tggcagagaa	acctaggact	caaagacaga	aggctcctgc	tccaatgaca	ccggcgatgc	1800
ctgagtcaga	atcctaatac	aggttgtttt	ccctgtccat	atcctggact	tgaggctctg	1860
aaaaccatth	ttataactth	tgacctaatc	atthgtttaa	agttagctth	ttttcttctt	1920
ttttcactca	aacaaaagca	tgttcaactt	tattactctg	tctgaatag	agaatagaat	1980
tctttgtcat	aatagaagg	taaggaagga	aataaatcct	gcacaatgaa	aagaaaataa	2040
tatgtttatt	gggttggacc	acctgaaatt	gctgatactt	gacctttttt	gaccttctta	2100
aaacaactth	tgcatgtgt	tcagtgtaat	aatgttagg	tgacctgatg	aggcttctgt	2160
gtcctcctgg	ctttgaaaag	tgagctcagt	gaggattagg	gaggtgttaa	aaccatatta	2220
gcaccatcct	gagactttat	ccttgacaaa	atcaggttta	aaagagaact	ggatgctggg	2280
tcagcgtctg	agtgtgcgat	ttaacgttac	ttaaattctca	tctctctacc	atctaaaatg	2340
atcctgtgct	caccgacaac	ttctgtccct	aactgcaaac	cactgagcta	atccaactgc	2400
ttgccctgta	gttggggaaa	ctagctaggg	aggcagaggg	acctcctggt	gtagctaata	2460
attaataata	acatttccca	ctgactgagt	gctctccatg	ccacctgctg	tgctgcacgg	2520
tttgaaatgc	aggatcatct	tgaattcttc	aactgcgcaa	tgagagatga	actattactt	2580
tttctacttg	acagctgggg	aaactgaggc	tggtgatttg	cataagggtca	cacagtcaca	2640
aatggcatg	catgttcagg	attggattct	ccctgtccca	cggacccctg	ctgtgctttc	2700
aatgccagac	acagtgcctg	gcacacacag	catttattha	ttgagcccc	attgtgtgcc	2760
aggcgtgtg	ttaggtcctg	ggaatatggg	actgaataaa	gcagttaagg	tgctgttgt	2820
caatggagct	tacagtcaaa	gtggagagat	ttttaaaaac	gaatacatat	aatgtgaag	2880
agaaatgaat	agcaatcatt	gttctgatga	agaccaactg	gaagaatgta	atgggggagg	2940
agtcgggacc	aggagagtca	acattagacc	agggtgtcag	ggaaggcctt	tctgaagagg	3000
agacatttga	gctgacctct	cagaattaag	aaggaccctg	acatacaacc	tctaaattct	3060
gagggtcata	cagtagaata	ttccatatat	gtatatatga	aatatcctat	atctgtgctg	3120
tccaattatc	cactagcccc	ttcaggctat	tgaacatttg	aatatgggt	gggtgtgactt	3180
aagaactgaa	tttttaattt	agttttactt	catttttaatt	agtttaaatt	taaatagcca	3240
catgtagcta	gtggctacca	tattaaacaa	cataggctctg	gagaaaggac	tgtgcagaga	3300
gaggaaatag	caagtataaa	atgtctagta	tgggggcatc	caagatgatt	taaattcttc	3360

ttttctttaa atgcctggtg tgtttgaaga acaggcccat gaggctggac tagaggaagt	3420
cagaagaaag aggttggaga tggggtcaaa gaggctggca agggccagac agcacagagt	3480
cctgcacacc ttgggaaggc tttttggatt ttatttttaa gaaagttgag cctgggaaca	3540
acatctgact ttctttgttt gaagagtcct cagcctactt tgagaagact ggatcggagg	3600
gatgtaaaag tggaaggatt taggttaatg ttgtagtcat ttgggctaca gaagatgggg	3660
catggaccaa gatggtggca gaagtgtgga gataactgga tatttgggag ataaaaccaa	3720
taggaactgg ttgtgagtga tgaaggaaaag aagagaagca aagatgactc ccaggtttgg	3780
ggctgagcac tgaggtggga aatactggag cgaacagttt tgattgagaa gaatcaagtt	3840
gggaatacaa agcttaagat gcctgtaagg catccaaatc aacagtgttt gagttttgag	3900
cttaaagaag agttcagggc tggagatgat tagcctatag ctggtattta aagccatgga	3960
ggcaaccagt atatatgcag tgaaaggata gagagatggg tggaaagatg attggatgga	4020
tgcatggatg gatatatgga tagatggatg gatggatggt tggattggat ggatggatgg	4080
atggatggat ggatggatgg atggatggat ggatgaataa atggaccagt ggatggaggg	4140
acagatgagt ggatggatgg ttggatggat ggatggatgg atggatggat agatggttag	4200
atgactacct aaatggatga atggatagat ggatgagtag acggatggac aaatcaatag	4260
gatgaatggg ggatggatga ttggatagat tgatggatag atattgccta ggtggatgtg	4320
taggtcagtc tcacttctac ctctgaaat ccatcttctg gtagaatgat ataaaaaatg	4380
catgtggaga gaaagtcagg ctctgctta cctatcagca acatcctcat tttgtgaact	4440
cttctgttaa cccccagtgg aggatttggg acttcctgag aaaataatgt cacccttttg	4500
ccctaattca tctccacttg gtcaagaata gcaactgcc a taggtcggca aattcatctt	4560
cagttcctgg tcacccaggg caataatccg acccttacct caaaccaga aaccacaacc	4620
ccagggtcc tctgccccct ggatcccagt tttctaacaa tctctcttct ttaccagggtg	4680
tctcccagga gtcttccaag gttctcaaca ccaatgggac cagtgggttt ctcccagggtg	4740
gctacacctg cttccccac tctcagccct ggcaggctgc cctactagtg caagggcggc	4800
tactctgtgg gggagtctg gtccacccca aatgggtcct cactgccgca cactgtctaa	4860
aggagtatgt gggggccggg ggagcatggg gtagggatga gaatgggact gggattgtgg	4920
atggggtaga gttggatttg aggatggagt tggagttagg gttggggatg gacatgggag	4980
tgagaatgag gtttggggtt gagatatggg gattgggtat gggaatagaa tcaaagtagg	5040

ggatttggat	gggattgaag	ttgaggatgg	gggagatgta	tttggagatg	aggaaggtag	5100
gatggagaag	aagttaggtt	ggggatggga	agaggttggg	gctgggatgg	ggatggaaat	5160
gggctcatct	tctttcctaa	ccaccttctt	tctgcaccca	cagggggctc	aaagtttacc	5220
taggcaagca	cgccctaggg	cgtgtggaag	ctggtgagca	ggtgagggaa	gttgtccact	5280
ctatccccc	ccctgaatac	cggagaagcc	ccaccacct	gaaccacgac	catgacatca	5340
tgcttctgga	gctgcagtcc	ccggtccagc	tcacaggcta	catccaaacc	ctgccccttt	5400
cccacaacaa	ccgcctaacc	cctggcacca	cctgtcgggt	gtctggctgg	ggcaccacca	5460
ccagccccc	gggtatgcac	ccacacaggt	ggcctgaggc	cccataggag	tggctgggga	5520
aacaggggca	gagatgggag	ggaaggctctg	aggtaggttc	ctttatatat	aaaaatataa	5580
ataagtaa	aatatatat	atttaaagtt	agctgtatcc	tttatataaa	tataaattca	5640
tgaatatata	aaaatatgag	tatataaatt	catgaatata	tagaaatata	aatagatcta	5700
atatatgaat	atattatatg	atgtatatta	tgtattatat	agtaatataa	ttatatatta	5760
tacaaaaagt	atacaaatta	aatgtatfff	ataaattata	aaatttatca	attatgtatt	5820
ttaaatatgt	atttctgcat	aatgtatata	ttatatataa	tctatattta	aattatatat	5880
tataaatgta	ttttataaat	gtatacatff	atatatffat	atactgtaaa	tgaatfftat	5940
catttataat	atataaatca	tacatatataa	atgtfftatat	ttctataatt	tataaaatgt	6000
ttaatataatt	aaatatggff	attaatgaaa	tgtctaataa	ttcaatgtaa	taattaattc	6060
tatatcatta	cttagtaagt	ataatacatt	atatatgtga	atataaagff	gatgtatata	6120
ccgacaagag	ccffttgcat	ctccctagca	atccctgact	ctctcccagc	ctcatgtffg	6180
tatctffctc	ctcaacatgc	cctgtctctc	ttcctaccat	tctatccaac	tctcccgtaa	6240
ctcttcccat	ccctgttcct	gctffttccca	tctfftaattc	tctatffctg	accatctccc	6300
tattccaact	ccctctctcc	aactffctct	ccccaccgct	ggctccacca	ctctccttat	6360
caaccttcca	ttctcttgte	ccttccctcc	ttgtccttcc	ctccactff	ctcctcatct	6420
ctcccttcgc	ctctctccca	tgtccctcca	tattffctgte	acttccgffg	ctfftaccag	6480
ataggtgctc	atctctffctc	ccatctffct	cttcccatct	caatffftcta	tctactctff	6540
acccattcaa	ctcgcctatt	tcaccttcat	cccatatcct	atccaggctc	gataccttag	6600
acffctctct	tctffctccc	agtgaaattac	cccaaaactc	tacaatgtgc	caacatccaa	6660
cttcgctcag	atgaggagtg	tcgtcaagtc	taccaggaa	agatcactga	caacatgffg	6720

tgtgccggca	caaaagaggg	tggcaaagac	tctgtgagg	tgaggccggg	aggctggtgg	6780
gtgccttgga	caggatagaa	agccagaatg	gaagtgacag	atgctgggga	aaaagctttg	6840
ttccagcct	taggggaacc	aatctttata	agatacaatg	tccctcaca	taggaggtca	6900
agacaaaaag	gggtaccag	ggatggcagg	aataattcat	cataagcccc	agctttgact	6960
gagtggctgc	caagatccct	gtgttgagat	gcataaagg	tggattctt	tcacttgtga	7020
gtgatagaca	accaactcaa	actggcttaa	acaaaatgca	ggcttttgta	actgaaaatc	7080
caggttgtct	ggctttaggc	acagatggat	ccaggtatgc	aaattgtgtg	tttggaaatc	7140
tgtctttctt	ttaactctca	gctcttctt	attctgtttt	ggcttcattc	tcggttagat	7200
tcttcccatg	acaagatggc	cccagcagct	ttgagcttac	atcctaccct	ctaggcaacc	7260
ctattagaaa	gagaacctct	cttttccaat	agttcacaca	aaagtcttaa	gcatgattct	7320
cactaggctg	acctaagtca	tgtgtcttga	gccatcactc	caccagagct	gtgggattct	7380
ctgatggggc	aagcctgagt	cacatagtta	actgtgggtg	ctggagaggg	gcagggacaa	7440
actgcatgga	ttggaagtgg	agaagggcag	ttccccaaat	gaaaaaatca	ggagaggctg	7500
ttacccaaat	aaggggaaat	ggccaagtac	agtagttcat	gcctgtaatc	ccagcacttt	7560
gggaggctga	ggtgagagga	ttacttgagc	ccaggagttt	gagaccagcc	tgggcaacat	7620
agtgagactc	tgtctctaca	aaaagaaaaa	aaagttttta	aattagccag	gtgtggtgga	7680
gtacaactgc	agtcctagtt	actcgggagg	ctgaggcaga	aggactattt	gaaccagga	7740
gttcaaggct	gcagtgaggt	atgatcatgc	cactgcactc	cagcctgggt	gatagagcaa	7800
ggcctgtct	ctaaaacaaa	aagaaataaa	tagagcaaga	cactgtctct	aataaataaa	7860
taaataaaaa	tttaaaaatg	aatgtttaat	tttttaaaaa	taagaggaaa	tggatactac	7920
atgagcaaaa	aatagccttc	atcaataaag	aagttgagat	tggattcagt	gagaaagagt	7980
atgatactat	attaatgata	tgtgccttga	tcgattagt	atgtctgcct	tgggccagg	8040
aagagaaata	gacttacacg	tgtgttgcac	accctgcca	gatatgaatg	ggttcactca	8100
atagtgagag	acacaaatga	gccttaaata	ggagcagggt	cagctggtgt	ggggcagggg	8160
gtgatttagt	accagggaaa	caaaaatggg	tatgaagtaa	gttgttacca	ttttaatgaa	8220
actgaggaac	agagaaaaac	acagaaattt	ctctgtgtct	ctctttctct	gggcctatct	8280
ctgtctttct	gtccctattt	ctgtctcttg	ctgtctgtcc	ctctgtgttt	gtcttcttgt	8340
ctgtttctca	ctgtcttcat	tgtttctct	cacactgtgt	gtgtctgact	ctgcctctct	8400

gagtctcctt	ctctgtgtgt	gtctctctcc	atctttcact	ctctccccac	acctccctgt	8460
ccctgccttg	tttagcccca	gcaaggaccc	acctctctct	ctctttcttt	ccccaaactca	8520
gggtgactct	gggggcccc	tggctctgtaa	cagaacactg	tatggcatcg	tctcctgggg	8580
agacttccca	tgtgggcaac	ctgaccggcc	tgggtgtctac	acccgtgtct	caagatacgt	8640
cctgtggatc	cgtgaaacaa	tccgaaaata	tgaaaccag	cagcaaaaat	ggttgaaggg	8700
cccacaataa	aagttgagaa	atgtaccggc	ttccatcctg	tcaccatgac	ttcctcacat	8760
ggctctgctta	gcccttctct	gctccttatt	cccagtgttc	catttgaacc	agtgatccat	8820
gtcctgaaaa	atgctcaatc	tcagctaaca	ttccatgttt	cagaagcatt	caggcactgc	8880
caggcttgca	gtctcccaga	tgttgcatcc	ctgaaacatc	tcaacaacct	gaatgtccca	8940
accagacaa	tggcccaggt	ctctcaactt	catcagtgtg	gcttctatga	gccagatca	9000
ccacctgaac	gttctgtctg	tggcacattc	ttaaataatt	ccatcagccc	atctcaacaa	9060
tatatgtcct	ataaatggac	catccttgac	aacatcctct	aactcttcaa	gtatttattc	9120
aatgccagta	tcctagacct	tctatttttt	gcaactcaaga	aggctctaga	ctcccatgat	9180
agttcatcct	gaaaatatct	tcttatgccc	acaatcttct	gccctgacaa	cattctgtgt	9240
acctctgtga	ctcaccacag	ctaacattgg	atcctcagaa	tatttcattc	tcacactggt	9300
atgggtgtct	cagaagtccc	aacccaacct	acatcccaca	ttcttccaat	acccacctc	9360
tgccaacatt	ccctctctga	atcaatggca	ccctagtctc	tagagttata	gggttcagta	9420
taccaaaggg	tcttcttgcc	tgaactttat	tgtctaccaa	atattccgtc	ttgtatcccc	9480
tccatgaaca	tccttgggtca	gtgtcccttg	ctgttacatc	tttgtgcatg	accctaaaat	9540
gtagtgcaaa	tccttgcttt	ggacaagtta	taaaactcac	agtctctgtg	ctttctcatc	9600
tgtaaaatgg	gttcataatt	ttttttaatt	gtaacattat	tacaagaata	aatgtcaagc	9660
atttatcact	attattattt	gcatgggttc	cataaaatat	taccttagaa	tgttaataac	9720
agcccttcga	atttgcagag	tgtccaaaaa	aagtgttgca	ctgatttatt	ttcctcagga	9780
gacatttctt	cagtgttgac	tatgtgcaag	cactctcctg	ggtgttggtta	aatatagttt	9840
atttactcaa	caaatatatt	tacctatcaa	gagccaggca	ctgttgacaga	gacaagtgat	9900
aaccaatgag	ttaaacagat	aaaaacttct	gcccttgtag	aacttacatt	cttttcaaga	9960
agtctccata	acaatgaata	aagaaatagg	ctgtcagggtg	gtgctgcaag	ccatagcaag	10020
aatgaaaca	agggccatat	gtggtagctc	atgcctgtaa	taccaacact	gggaggccaa	10080

<210> 3
<211> 27
<212> DNA
<213> artificial

<220>
<223> Primer

<400> 3
tccaaggaat tcaacaccaa tgggacc 27

<210> 4
<211> 27
<212> DNA
<213> artificial

<220>
<223> primer

<400> 4
ccattgtcta gattgggaca ttcaggt 27

<210> 5
<211> 16
<212> PRT
<213> homo sapiens

<400> 5

Val	Ser	Gly	Trp	Gly	Thr	Thr	Thr	Ser	Pro	Gln	Val	Asn	Tyr	Pro	Lys
1				5					10					15	

<210> 6
<211> 6
<212> PRT
<213> homo sapiens

<400> 6

Val	Leu	Asn	Thr	Asn	Gly
1				5	